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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/792,468	01/31/1997	CHIZU SHIMIZU	94049B	4039

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EXAMINER

HESS, DANIEL A

ART UNIT	PAPER NUMBER
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2876

DATE MAILED: 07/26/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

08/792,468

Applicant(s)

SHIMIZU ET AL.

Examiner

Daniel A Hess

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 5/20/2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 37-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 37-53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 43, 44 and 45 are objected to because of the following informalities: The phrase “selecting either a receipt for the payment is needed or not” in each of those three claims is not grammatically correct. The substitute phrase “choosing whether or not to receive a receipt” has the same meaning and is grammatically correct. Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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4. Claims 37-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Collins Jr. (US 5,149,947) in view of Swartz et al. (US 5,412,193).

Re claim 37: Collins shows a shopping cart comprising a cart body 50 (see figs. 1-5; column 3, lines 46-49) comprising a scanning terminal 44 (figs. 3-5; column 3 line 48 and lines 62+) which reads codes on individual items. There is further a commodity price retrieval system [102, 104] (figure 7, column 4, lines 30+). Collins further discloses (column 1, lines 34 and 50-55) that the portable scanning terminal includes a magnetic stripe reader that the customer can use to make credit card purchases.

Although Collins fails to show a system for handling prepaid cards which reads prepayment information from the prepaid card and subtracts the price of the individual commodity from the remainder amount, and registering this amount as a new remainder, it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the credit card system of Collins with the notoriously old and well-known prepaid card system due to fact that both the credit card system of Collins and prepaid cards are commonly recognized in the art as being equivalent means of payment. Metro fair cards are an example of existing prepaid cards that read prepayment information from a prepaid card and subtract the price of the individual commodity from the remainder amount, and register this amount as a new remainder. In view of commonly known practices and procedures, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include such conventional practices and procedures into the teachings of Collins because one more payment option makes the user's experience that much more convenient.

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Collins fails to show that the cart is able to act independent of external hookups or that it can process transactions anywhere.

Swartz shows (column 2, lines 25-55) a mobile supermarket checkout system that can be located anywhere and perform sales transactions, without having to be connected to a fixed external computer.

In view of Swartz' teaching, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the old and well-known full mobile transaction capability for a supermarket checkout system as taught by Swartz into the teachings of Collins because as Swartz notes (column 1, lines 40-45) it is desirable to optimize space usage by avoiding fixed checkout stands which may often go unused.

Re claims 38 and 39: Metro fare cards, as discussed re claim 37 above, indicate insufficient funds by rejecting the card and the user can then either (i) use another fare card, or (ii) avoid using the card.

Re claims 40-42: Collins, Jr. has (column 3, line 67 to column 4, line 5) a receipt issuing section issues a receipt upon completion of the payment.

Re claims 43-45: Although Collins fails to disclose explicitly that there is a choice given of whether to receive a receipt or not, such means are notoriously old and well known in the art. Self serve gas stations have long given users the option of whether or not to receive a receipt. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the old and well-known choice of whether to receive a receipt or not as is notoriously old and well known to one of ordinary skill in the art because if a person does not plan to use such a receipt for bookkeeping purposes, then it is a waste of paper.

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Re claim 46: Collins shows a shopping cart comprising a cart body 50 (see figs. 1-5; column 3, lines 46-49) comprising a scanning terminal 44 (figs. 3-5; column 3 line 48 and lines 62+) which reads codes on individual items. There is further a commodity price retrieval system [102, 104] (figure 7, column 4, lines 30+). Collins further discloses (column 1, lines 34 and 50-55) that the portable scanning terminal includes a magnetic stripe reader that the customer can use to make credit card purchases.

Collins fails to show that the cart is able to act independent of external hookups or that it can process transactions anywhere.

Swartz shows (column 2, lines 25-55) a mobile supermarket checkout system that can be located anywhere and perform sales transactions, without having to be connected to a fixed external computer.

In view of Swartz' teaching, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the old and well-known full mobile transaction capability for a supermarket checkout system as taught by Swartz into the teachings of Collins because as Swartz notes (column 1, lines 40-45) it is desirable to optimize space usage by avoiding fixed checkout stands which may often go unused.

Re claim 47: Although Collins fails to show a system for handling prepaid cards which reads prepayment information from the prepaid card and subtracts the price of the individual commodity from the remainder amount, and registering this amount as a new remainder, it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the credit card system of Collins with the notoriously old and well-known prepaid card system due to fact that both the credit card system of Collins and prepaid cards are commonly

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recognized in the art as being equivalent means of payment. Metro fair cards are an example of existing prepaid cards that read prepayment information from a prepaid card and subtract the price of the individual commodity from the remainder amount, and register this amount as a new remainder. In view of commonly known practices and procedures, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include such conventional practices and procedures into the teachings of Collins because one more payment option makes the user's experience that much more convenient.

5. Claims 48-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Collins as modified by Swartz, in further view of Ehrat (US 3,836,755). The teachings of Collins as modified by Swartz have been discussed above.

Re claims 48 and 49: Collins as modified by Swartz fails to show that the payment processor has a system whereby power can be turned on and off in response to an instruction received from an external management apparatus.

Ehrat notes (column 19, lines 58+) that a shutoff system is envisioned in a mobile self-service shopping cart whereby an individual cart can be controlled in response to an instruction received from a central management apparatus.

In view of Ehrat's teaching, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include control of the cart from a central management apparatus as taught by Ehrat in the teachings of Collins as modified by Swartz because it is less time consuming and energy consuming to control the cart remotely. Although Ehrat doesn't specifically refer to cutting off power, that would have been obvious as well, in view of such

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notorious old and well known art at the time of the invention as the television remote which can turn off a television remotely. Among many advantages for this, one is power savings, particularly useful in a device which is battery powered, as Collins modified by Swartz would be.

Re claims 50-53: Collins as modified by Swartz fails to show or teach a measuring section for measuring the total weight of commodities carried by the cart or an observing section to observe whether a change in weight accompanies a product reading operation, and an alarm generating section for generating an alarm if the change in weight does not accompany a read operation.

Ehrat shows a purchasing trolley 2, comprising a reading means 24, a goods basket 18, weighing scales 182, signaling means [SE₁, SE₂], a purchasing container electronic system 91 to determine whether the data were correctly read and whether the weight increase measured by the scales coincides within specific limits with the weight data on the data support or whether placing the article into the goods basket was accompanied by a weight increase, an error recognition and transmission circuit (column 6, line 13 to column 7, line 9). See abstract, lines 5-18; column 1, line 47 to column 2, line 21 and column 3, line 15 to column 4, line 63, and column 6, line 13 to column 7, line 62.

In view of Ehrat's teaching, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the old and well-known measuring section for measuring the total weight of commodities carried by the cart and observing section to observe whether a change in weight accompanies a product reading operation, and signaling means for signaling if the change in weight does not accompany a read operation in the teachings of Collins

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as modified by Swartz because this system helps to ensure that each item that enters the cart will be paid for, and thus helps avoid theft, which is a risk when shopping is done automatically.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Halling et al. (US 5,418,354) describes a self-service cart system which is very similar to the claimed invention. The applicant is urged to closely examine this patent also, before amending the claims.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel A Hess whose telephone number is (703) 305-3841. The examiner can normally be reached on 8:00 AM - 5:00 PM M-F.


8. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G Lee can be reached on (703) 305-3503. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

9. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



DH
July 17, 2002

Daniel A Hess
Examiner
Art Unit 2876



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SUPERVISORY PATENT EXAMINER
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